

The fear of being laughed at among psychiatric patients

GIOVANNANTONIO FORABOSCO¹, WILLIBALD RUCH², and
PIETRO NUCERA¹

Abstract

The fear of being laughed at brings to the fore the problematic side of an otherwise very positive aspect of human experience. In the streamline of investigations analyzing the presence and characteristics of gelotophobia, a study focusing on psychiatric patients was carried out. The diagnoses were established according to the criteria of the DSM IV TR (American Psychiatric Association 2000). Based both on clinical and empirical observations, the main hypothesis advanced was that using the Geloph<15> scale, Ss with a psychiatric diagnosis would have higher mean scores than Normal Controls. An additional hypothesis was that intragroup differences were also expected among the various diagnostic categories. The main hypothesis was amply supported, and explanatory suggestions of the finding were proposed. Intragroup differences proved also to be significant. Patients with personality disorders and patients with schizophrenic disorders scored higher than Normal Controls and the other diagnostic groups. And also the number of years spent in psychiatric care resulted significantly associated with higher gelotophobia mean scores. From the present study, a circular, interactive relationship was confirmed between laughter and mental health, which can alternatively be highly positive or deeply negative.

Keywords: Fear; gelotophobia; laughter; psychiatric patients; phobia.

1. Introduction

Laughter is deservedly praised as one of the most positive aspects of human experience. Thoughts and books have been dedicated to analyze and

explain how it functions and why it is so positive. But laughter is also a complex phenomenon. And in this complexity some negative aspects find place. Not only can one laugh too much, or in inappropriate circumstances, laughter can really hurt. In the essence of laughter many scholars have found ingredients belonging to the negative if not evil parts of the human being, aggressiveness and cruelty among them. Laughter can be a very sharp weapon inflicting, intentionally or not, discomfort and pain.

When empirical research work started on the concept of gelotophobia (Ruch and Proyer 2008a), a shift from the positive to the negative, problem bound, aspects was accomplished bringing to light the “fear of being laughed at.” And that implied also a second shift. In the most frequent and traditional perspective, attention has been typically focused on the laughing subject.

Take one of the most often quoted sentences on the nature of laughter, the statement formulated by Hobbes in the *Treatise of Human Nature* (1650), and restated in the *Leviathan* (1651): “The passion of laughter is nothing else but sudden glory arising from some eminency in ourselves, by comparison with the infirmity of others, or with our own formerly”. The spotlight is on the one whose laughter is under philosophical inquiry. But another actor is present on the stage, maybe in the shadow, maybe in discomfort, the one laughed at (and it is a peculiar case when it is the first actor himself). Gelotophobia related investigations, initiated in single case studies with the observations of a group of patients (Titze 1995, 1996, 1997, this issue), turn the spotlight on the laughed at deuteragonist, the second mainly neglected actor.

The definition of gelotophobia as the “fear of being laughed at” is fairly easy to place into cognitive models already available. Being an intuitive description it is simple to understand and to handle. Nonetheless, the underlining construct actually covers a highly articulated class of phenomena.

What we are dealing with might not be precisely *fear* but, instead, feeling uneasy, annoyance, or anxiety. Platt (2008) showed that the negative emotions of shame fear and anger are indicative of the emotional pattern of gelotophobes in teasing and ridicule social interactions. In the place of laughter we may actually have an ironic smile, a sarcastic mimic, or a hilarious mockery. In this respect, a mild form of the disturbance may correspond to, say, the nuisance of being the butt of a witticism. At the other extreme, we might find the delirious thought of being persecuted by hallu-

cinatory voices evilly laughing at an overwhelmed victim. Not forgetting that sometimes speaking of laughter we refer also, or instead, to *humor*. It is a trivial, and true, observation that the two can be totally separate entities (humor without laughter, laughter without humor), but also have overlapping and coinciding aspects. Gelotophobia clearly brings into the picture still another alternative, that of conflicting aspects: as long as humor implies enjoyment, amusement, pleasure, the contrast with the unpleasant, disturbing characteristics of gelotophobia is apparent (laughter vs. humor; see Ruch, Beermann, and Proyer this issue, for results regarding the humor of gelotophobes).

With this term we refer to a variety of events, which can be highly different. But at same time they all share a family resemblance. This is characterized by a negative value, which the feeling of being the (real or imagined) target of a derisory behavior has for the involved subject (see Proyer et al. this issue). We can however usefully consider the “fear of being laughed at” as prototypically representative of the whole of these different, and still similar, experiences.

We can venture to say that every human being has come across at least one of them, at least once. It is a very common ingredient of life. For some, massive doses. It is normal (both in cultural, psychological, and statistical meanings) to be annoyed by someone laughing at us; and, correspondently, to be afraid that someone may be laughing at us. On the other hand, obviously enough, there is also a totally positive way of experiencing the being laughed at situation, as it happens in a joking relationship when friends tease each other being in turn the victim and the aggressor, as part of a social interplay. It can even happen that some people who are not teased, and laughed at, can feel neglected and kept out of the social game. However, gelotophobes were shown not to be able to distinguish between playful teasing and ridicule (Platt 2008). One important question that the research stream is aiming to answer is when and how the normal, psychological attitudes and reactions become negative, a problem, or even a pathological condition, namely an anxiety disorder that takes the form of a phobia.

The Geloph questionnaire, first in its 46 items form, and then in the definitive 15 items form, has proved to be an efficient and reliable instrument to analyze this area thoroughly (Ruch 2004; Ruch 2006; Ruch and Proyer 2008a; Ruch and Proyer 2008b; Forabosco et al. 2006). The results obtained show that it is possible to establish the extent and the characteristics of the “fear of being laughed at” in the general population.

And, more specifically, it can be used to quantify the percentage of individuals with different degrees of gelotophobia (from slight to extreme).

2. A study with psychiatric patients

Studies having such terms as *laughter/humor* and *psychiatric patients* as joined key words are limited in number. Yet they have covered many issues of various and interesting kind, including humor reactions and preferences of psychiatric patients (for instance, Levine and Rakusin 1959), how psychiatric patients are depicted in cartoons (Walter 2000), the use of humor in psychotherapy (Fry and Salameh 1993), the impact of mental illness on humor (Forabosco 2007). Clinical and empirical evidence shows that the capability to positively experience humor and laughter are often compromised in psychiatric disorders, though in a somewhat different way. The type and quantity of the humor and laughter impairment parallels the severity and the main features of each condition (Corcoran et al. 1997; Marjoran et al. 2005). A tentative formula, synthetic though partial, was stated as such: “In general, major depression is characterized by severe humor reduction, manic state by humor enhancement, and schizophrenic disorder by humor alteration (it might informally be said that the depressed individual does not feel like being humorous, the manic feels it too much, and the schizophrenic feels it oddly)” (Forabosco 2007: 292). However it must be said that no simple, or simplistic, statements can be made as regards humor and psychiatric conditions. For instance, a study conducted by Falkenberg et al. (2007) has confirmed that schizophrenic patients are less likely to understand humorous items in general than normal controls, but no difference was found as the use of humor as a coping strategy. Furthermore, the capability for humor appeared to be more influenced by co-existing depression than by schizophrenia *per se*. The concept of gelotophobia provides an opportunity to extend and study the area in depth adding a relevant and promising research topic.

Gelotophobia, as all phobias, may be the main and only psychopathological problem of a given subject, or it may be a component of some other condition. That is, we can have an individual who is (only) gelotophobic; or who is, for instance, a schizophrenic¹ and (also) gelotophobic. But we can also have a schizophrenic who is not gelotophobic. In this respect the situation is, *per se*, not different from that which we find in the

general population. The question then arises as to whether the presence of gelotophobia is expected to be more prominent and frequent among psychiatric patients. This could not necessarily be the case, because a psychiatric condition, even a severe one, is not bound by being accompanied by all possible psychological problems and shortcomings. However, laughing and, even more importantly, being laughed at require a psychologically healthy and functioning individual in order to experience them in a positive and also enjoyable way. As, by definition, psychopathology implies, in various forms and degrees, subjective suffering, symptoms production, interferences with cognitive, emotional, relational functions, laughter related phenomena are likely to be compromised, at least to some extent (Forabosco 2007). What then is to be expected measuring an index by means of a research tool such as the Geloph<15>? The question is not trivial. In fact, though it could be a simple prediction that psychiatric patients will score higher than normal controls, the prediction has not been previously tested. Some conditions pertaining to the psychopathological dimension have already been taken into account. Gelotophobia of shame-based and non shame-based neurotics has for instance been studied and compared, and also patients with depression problems have been examined (Ruch and Proyer 2008a; Ruch and Proyer 2008b). But no extensive study has been conducted on a broad range of diagnoses. Furthermore, the amount of the expected difference is to be established, and so are the prevalence rates.

A preliminary study with 34 psychiatric patients, including schizophrenics, patients with mood disorders, personality disorders, and anxiety disorders, revealed a significantly higher mean score for Geloph<46> when compared with normal controls (Forabosco et al. 2006). In the preliminary study ($N = 70$; $N_p = 34$; $N_c = 36$) the mean scores were 2.27 for patients ($SD = .67$) and 1.45 for controls ($SD = .34$).

2.1. Aim of the present study

The leading questions of the present investigation were a) how is the presence of gelotophobia in the psychiatric population characterized and b) how does it relate to psychiatric conditions? For answering the first question a group of normal controls will be compared with a mixed group of psychiatric patients regarding the mean levels on gelotophobia and the percentage of people displaying slight, pronounced (or marked),

Table 1. *Composition of the sample for gender and age*

	Controls (Nc)			Patients (Np)			Total (N)		
Gender	M	F	T ¹	M	F	T ²	M	F	T ³
Freq	35	58	94	53	43	100	88	101	194
%	37.23	61.70		53.00	43.00		45.36	52.06	
M	46.60	47.26	47.01	42.23	41.74	42.01	43.97	44.91	44.47
SD	16.64	14.86	15.47	8.42	10.67	9.45	12.46	13.46	12.98

¹One value missing

²Four values missing

³Five values missing

and extreme gelotophobia. For answering the second question it will be necessary to compare the scores of five diagnostic groups among each other and with the normal controls.

3. Method

3.1. *Participants*

A total of 194 adults, 100 patients (53 male, 43 female, 4 did not indicate their gender; age ranging from 22 to 64 years) and 94 controls (35 male, 58 female, 1 failed to indicate gender; from 20 to 77 years), took part in the study. The frequencies of males and females are given in Table 1.

Table 1 shows that the two groups were not equivalent in age. The mean age of normal controls was significantly higher ($t = -2.66$; $p = .009$). The two groups were highly heterogeneous with respect to variables like gender, age, profession, and marital status. Controls (Nc) were recruited in a variety of situations, including attendees of an educational organization (an open university named *Università per la Formazione Permanente di Ravenna*), individuals contacted in their working place, and students. Patients were recruited among the attendees of Italian public psychiatric institutions.

3.2. *Instrument*

An Italian version of the Geloph<15> scale devised by Ruch and Proyer (2008a) was employed. The 15 items of the scale, all positively keyed, de-

scribe the experiential world of gelotophobes: for example, 1. When they laugh in my presence I get suspicious (“Se si ride in mia presenza divento sospettoso/a”). Answers are given on a four point Likert-scale from 1 (= strongly disagree) to 4 (= strongly agree). Translation was carried out by an Italian mother tongue translator and crosschecked by an Italian clinical psychologist. Given to potential difficulties in comprehension, likely to be assumed in connection with a psychiatric condition, it was decided to ask the psychiatrist in care to evaluate the choice between self-administration and delivering the scale in an interview, having however the restriction of helping only to facilitate the literal understanding of the items. For analysis, only questionnaires which were fully completed for all 15 items were taken into account.

3.3. *Procedure*

Four psychiatrists and one social worker from different Departments of Mental Health (Dipartimenti di Salute Mentale) were asked to select and test the patients (Np). To the aim of the present study, a subject was defined as a “psychiatric patient” if he/she attended a psychiatric service at the time of the study, and had a diagnosis according to the Diagnostic Statistic Manual for Mental Disorders (DSM IV TR, American Psychiatric Association 2000) criteria established by a psychiatrist of a public institution (Dipartimento di Salute Mentale), and recorded in the individual clinical file. The psychiatrists and the social worker also provided the additional information regarding the diagnosis, the time of attendance in psychiatric care, and whether the Geloph<15> was self-administered or was delivered in an interview. The ethical issues were addressed as follows: 1. the patients were asked to freely participate in the investigation; 2. they were informed that the aim of the study was to explore how people feel and react in a variety of situations, whose nature could be derived from the items themselves; 3. they were guaranteed anonymity; 4. each patient signed a form for agreement.

Diagnoses were grouped into 5 broad, internally homogeneous, categories (a necessary step considering that psychiatric diagnoses are hundreds): 1. personality disorders; 2. schizophrenia disorders; 3. mood disorders; 4. anxiety disorders; 5. eating disorders. These categories, though not all comprising, covered all the diagnoses attributed to the patients of our investigation, and are representative of a wide range of

mental disorders. *Personality disorders* correspond to inflexible and maladaptive personality traits causing severe functional impairment and subjective distress. Paranoid Personality disorder, Schizoid Personality disorder, Borderline Personality disorder, are examples of the category. Under the label of *Schizophrenia disorders* are included conditions all characterized by psychotic symptoms (delusions, hallucinations, disorganized speech, etc.) as the defining feature. The *Mood disorders* have, as a predominant feature, a disturbance in mood. Major Depressive disorder, Dysthymic disorder, Bipolar disorder, are instances of this category. *Anxiety disorders* include a number of conditions from Panic Attack, Agoraphobia, Social Phobia, Obsessive Compulsive disorder, to Posttraumatic Stress disorder, etc; anxiety being the core element of these conditions. *Eating disorders* refer to two main severe disturbances in eating behavior, Anorexia Nervosa, characterized by a refusal to feed and keep a minimal body weight, and Bulimia Nervosa, whose main feature is binge eating with inappropriate compensatory behaviors, such as self-induced vomiting.

Years of attendance from the beginning of the psychiatric care, an indicator of the effect of time spent in a psychiatric condition and in a care setting, was classified into three categories: 1. less than one year; 2. from 1 to 5 years; 3. more than 5 years. Time of attendance was calculated for all the patients for whom the information was reliably available. An authorization form was also signed by the patients to express their agreement in taking part in the study.

4. Results

4.1. *Internal consistency*

Firstly, reliability of Geloph<15> was evaluated. Cronbach's Alpha, for all Ss, resulted .856 (for the Patients group was .850; for the normal controls .802), giving evidence of a good internal consistency.

4.2. *Mean scores of normal controls and patients groups*

In order to analyze the main hypothesis, the scores for the Geloph<15> of the two groups (Np and Nc) were compared. The means resulted highly

significantly different, with the patients group scoring higher than the normal controls (Np mean score: 2.25, $SD = .58$; Nc mean score: 1.79, $SD = .46$; $t = 6.0$; $p < .001$). It has to be noted that the mean score for Np (2.25) had a value not far from 2.5, the critical threshold of the gelotophobia area.

4.3. Levels of gelotophobia

The percentage of individuals with slight (scores between 2.5 and 3.0), pronounced (scores between 3.0 and 3.5) and extreme gelotophobia (>3.5) were computed for the normal controls and for the different diagnostic groups separately and combined (Table 2).

Table 2. Absolute and relative frequencies (percent) of participants with no (NG), slight (G_s), pronounced (G_p) and extreme gelotophobia (G_e) in the different diagnostic groups

	NG	G_s	G_p	G_e	Total
Normals	86 91.49%	6 6.38%	2 2.13%	0 0.00%	94 100.00%
Patients	69 69.00%	18 18.00%	9 9.00%	4 4.00%	100 100.00%
anxiety disorder	20 86.00%	3 13.04%	0 0.00%	0 0.00%	23 100.00%
eating disorder	3 60.00%	2 40.00%	0 0.00%	0 0.00%	5 100.00%
mood disorder	26 81.25%	4 12.50%	1 3.12%	1 3.12%	32 100.00%
personality disorder	7 50.00%	5 35.71%	0 0.00%	2 14.29%	14 100.00%
schizophrenic disorder	13 50.00%	4 15.38%	8 30.77%	1 3.85%	26 100.00%
Total	155 79.90%	24 12.37%	11 5.67%	4 2.06%	194 100.00%

NG = non gelotophobic. G_s = slight (scores between 2.5 and 3.0), G_p = pronounced (scores between 3.0 and 3.5) and extreme ($G_e > 3.50$) expression of gelotophobia; total G = all gelotophobes.

It is to be noted that in the Normal Control group no cases of extreme gelotophobia were detected, and 8 cases presented a level higher than 2.5. In the group of Patients 31 Ss had scores > 2.5 , and 4 had extremely high gelotophobia values, therefore showing a clearly differentiated picture in comparison with the Normal Control group.

4.4. Age, gender, marital status, and form of testing

As stated, age was not equivalent in the two groups and the difference between the means was statistically significant. However no association was found among age and mean scores for Geloph<15> for the entire sample (N : $r = -.095$) and for the two groups separately (Np : $r = -.035$; Nc : $r = .015$). It must be noted that in contrast to the present finding, in the preliminary study the association for the entire sample proved to be significant ($r = .279$; $p < .05$; Forabosco et al. 2006). Hence, the influence of age remains to be tested and the potential interference of the age difference in our study cannot be fully ruled out. In the whole sample (N) a significant association between gender and Geloph<15> mean scores was found ($r = -.16$; $p = .024$). This association appears to be linked to the Patients condition. In the Nc group the correlation was non significant ($r = -.068$) whereas in the Np group it was ($r = -.238$; $p < .05$). Hence male participants tended to have higher gelotophobia scores than female Ss in the Patients group. As one might argue that analyzing gender differences in the mixed group of patients is inappropriate due to the unequal distribution of the sexes in the different groups, t -tests with gender as a grouping variable and the Geloph<15> scores as dependent variable were computed for all groups separately. It turned out that all effects for gender were far from being significant ($p > .22$) with the exception of schizophrenic disorder. Here the eight females had a significantly lower mean ($M = 2.142$, $SD = .58$) than the sixteen males ($M = 2.667$, $SD = .50$; $t = -2.286$, $d.f. = 22$, $p < .05$).

This appears to be an unexpected result considering that in the preliminary study the finding was the opposite one, with female participants scoring significantly higher ($r = .413$; $p < .05$). It did seem that gelotophobia among psychiatric patients was gender sensitive, but interacting factors need to be hypothesized which can influence the direction of the resulting variable.

A 2 (patient vs. controls) by 5 (marital status) ANOVA did not yield significant main effect for marital status, $F(4, 178) = 1.442$, ns, nor a significant interaction, $F(4, 178) = 1.178$, ns. However, among the patients marital status just failed to have an effect on the mean scores for Geloph<15>, $F(4, 90) = 2.184$, $p = .077$. Therefore, it seems of interest to explore the groups more precisely. Figure 1 shows the gelotophobia scores for the married, cohabitating, widows, separated/divorced, and single among the controls and patients.

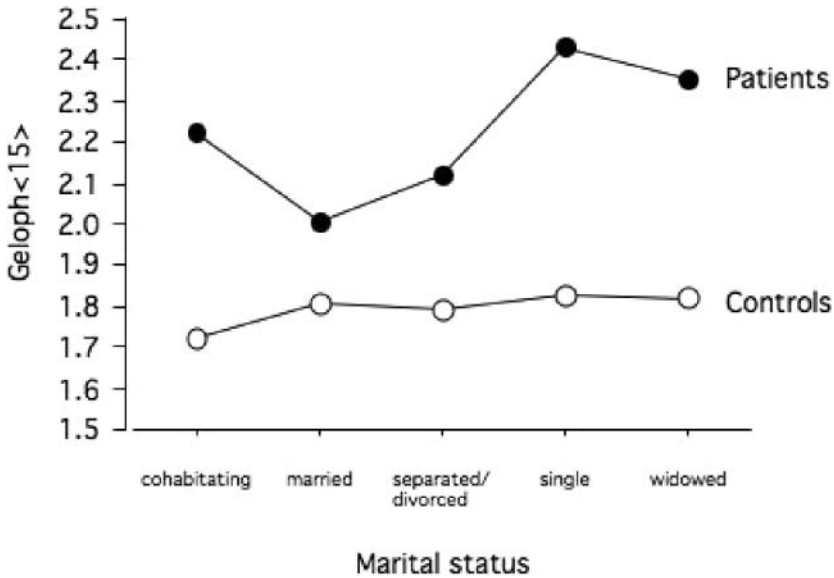


Figure 1. Level of gelotophobia in groups of different marital status among the normal controls and the different groups of patients

Figure 1 shows a noteworthy finding. In the Nc group the mean scores were practically equivalent (ranging from 1.72 to 1.83), underscoring that marital status does not have a relationship with gelotophobia. However, in the Np group, though the overall difference did not reach significance, the subjects who declared to be single scored almost half a point higher (2.43) than the married (2.00) ones ($F(1, 178) = 8.952$, $p = .0032$). The singles were also exceeding the ones formerly married and now separated or divorced, $F(1, 178) = 4.253$, $p = .041$.

As for the form of testing, no difference in the Geloph<15> mean scores was found between the Ss who self-administered the scale and Ss who were administered it in an interview ($t = 1.3$; ns). Though the number of Ss in the latter condition is small (7 Ss of the Np group), the finding indicates a positive flexibility as for the administration of Geloph<15>.

4.5. Diagnoses

In order to test whether the diagnosis plays a role in the gelotophobic dimension, a one-way ANOVA was performed. Diagnoses resulted

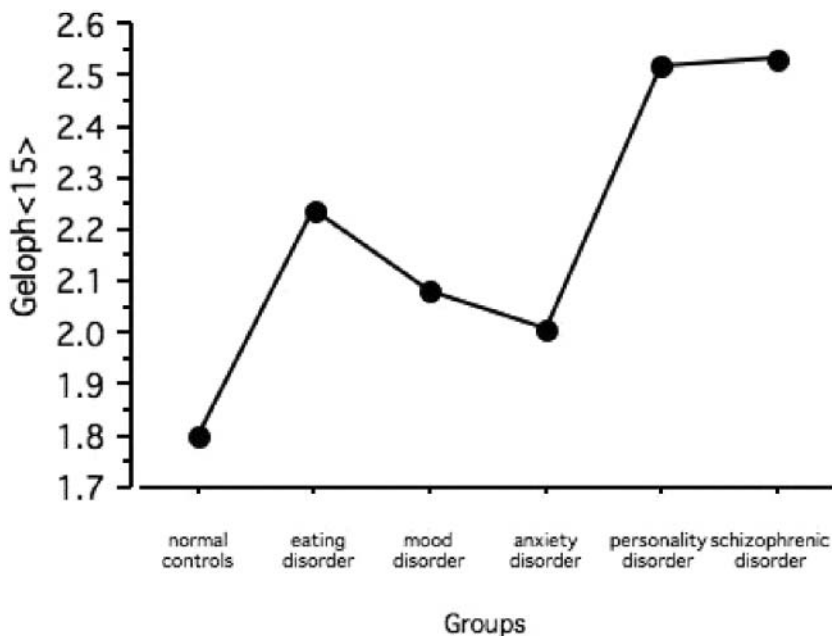


Figure 2. Level of gelotophobia among normal controls and the different patients groups

having a highly significant effect on the mean scores of Geloph<15>, $F(5, 188) = 11.965$, $p < .0001$). The general order, from lowest to highest mean scores, was Normal Controls, Anxiety Disorders, Mood Disorders, Eating Disorders, Personality Disorders, and Schizophrenic Disorders (see Figure 2).

First, the group of normal controls was compared with the average of the psychiatric group. A planned comparison yielded a highly significant effect, $F(1, 188) = 34.526$, $p < .001$, suggesting that gelotophobia was more prevalent among the patients who yielded higher scores than the controls. Normal controls tended to have a significant lower mean score for Geloph<15> than any other group (for anxiety and eating disorders the differences just failed to be significant; $p < .07$).

Differences among groups were examined performing a Fisher's PLSD post hoc test. Personality disorder and schizophrenic disorder were not different from each other, but exceeded the other disorders (e.g., mood disorders and anxiety disorders ($p < .01$)). They were numerically higher than the eating disorders; however, maybe perhaps due to small sample size this difference was not significant.

For the purpose of a first exploration of gelotophobia among psychiatric patients the groups of patients were formed according to broad psychiatric diagnoses, which may be regarded as too global a categorization. Only for a few psychological syndromes the number of patients were high enough for further exploration. Nor surprisingly, the group of patients with paranoia ($n = 7$) had by far the highest score ($M = 2.876$). The group of patients with major depression ($n = 17$; $M = 2.055$) was low, as were the 5 patients with obsessive-compulsive disorder ($M = 2.240$). The 12 patients with bipolar disorder ($M = 2.433$) were higher again.

4.6. *Years of attendance*

In order to test differences according the time spent in a psychiatric care setting, an ANOVA was computed with years of attendance (less than a year, one to five years, more that five years) as an independent variable and the gelotophobia scores as a dependent variable. Years in care had a significant effect on degree of gelotophobia ($F(2, 93) = 8.293$, $p < .001$). Post hoc tests (Fisher's PLSD) showed that those 44 patients with more than 5 years of attendance ($M = 2.44$, $SD = .54$) yielded a significantly higher mean score than subjects who had been in psychiatric care for less than one year ($n = 17$; $M = 1.86$; $SD = .54$, $p < .001$), and for a period from 1 to 5 years ($n = 35$, $M = 2.14$, $SD = .49$, $p < .05$). Numerically the patients that were in care for less than one year had lower gelotophobia scores than the ones between 1 and 5 years; however, this just failed to reach significance ($p = .0771$).

The analyses of the effects of years in care and type of psychiatric disorders are difficult to interpret as the effect might be confounded; i.e. the two variables are not totally independent from each other. For example, of the 25 patients with schizophrenic disorder 20 were more than 5 years in care, four patients between 1 and 5 years and one patient with less than 1 year in care. However, among the patients with eating disorders none was more than 5 years in care. To disentangle these effects the two groups with a substantial number of patients in three time spans were selected, namely patients with mood disorder (less than 1 year: 10 patients, from 1 to 5: 10 patients, more than 5 years: 11 patients) and anxiety disorder (less than 1 year: 5 patients, from 1 to 5: 10 patients, more than 5 years: 7 patients). A 2 (diagnosis) \times 3 (years in care) ANOVA

was computed and yielded no effect for diagnostic group or an interaction ($p > .40$). However, the main effect for years in care was significant, $F(2, 47) = 4.945$, $p = .0112$. Post hoc test revealed that patients longer than 5 years in care were significantly higher ($M = 2.274$) in gelotophobia than both other groups (patients less than 1 year in care: $M = 1.950$, $p < .01$; from 1 to 5 years in care: $M = 1.950$, $p < .05$). Clearly, a higher number of years in care went along with higher scores in gelotophobia, even in groups that in total did not yield high scores. At the moment, it can't be decided whether years in care affect degree of gelotophobia, or patients with higher gelotophobia scores are more prone to stay in care longer, or both are affected by a third variable. Interestingly, for the two groups of patients with personality disorder and schizophrenic disorder the years in care (more than 5 years, vs. less than 5 years) were not crucial ($p > .65$). Thus, for the groups where the fear of being laughed at is more built into their personality, it did not matter whether or not they were between 1 and 5 years in care or in care for more than 5 years.

5. Discussion

To start with, the recruitment of Ss, and hence the sample composition and representativeness need to be discussed. A well-known methodological caveat collecting data from volunteering Ss is that the results apply to the respondents only and no real information is available regarding the non-respondents. This holds true also in our investigation with the additional observation that dealing with psychiatric patients some further questions arise. Particularly, the inclusion/exclusion issue is a critical one. This concerns every subject who is asked to take part and respond in an investigation using such tools as questionnaires (first of all, the lack of a defined likeability to be included in the sample: most subjects are involved mainly for the sake of being reachable and available; and availability is not infrequently interfered by lack of time, suspiciousness about the aim, privacy problems, or simply unwillingness to comply). With psychiatric patients specific difficulties have to be taken into consideration. In the context of our study, in the sampling procedure subjects with an extremely severe condition, or in an acute stage, as well as patients with highly deteriorated cognitive conditions were excluded in advance, and the pertaining evaluation relied upon the attending psychiatrist. That means that whatever result derived from the study this cannot apply to

Ss with characteristics of that kind. The limit ensuing is of some importance, being this class of patients a qualitative prominent part of the psychiatric population. On the other hand, they represent only a fraction of the entire population affected by a psychiatric condition. A focalized study, with an adequate procedure, mainly observational, would be needed to have a more complete picture of the psychiatric Ss.

For the participants in our investigation, the expectation of a more important presence of gelotophobia in connection with a psychiatric condition was fully accomplished. In addition, the difference in the diagnosis appeared to be accompanied by different degrees of gelotophobic problems. The subgroups with Personality disorders and Schizophrenic disorders presented mean scores for Geloph<15> beyond the threshold of the critical area (2.5). At this stage, no conclusive hypothesis can be advanced as to the reasons of this finding. It is possible that some specific diagnostic feature may account for it. One relevant, though generic, explanation can be found in the severity of the diagnosis itself. In general, a Schizophrenic disorder is to be evaluated as more severe than, say, an Anxiety disorder. Particularly, if the functioning of the individual, instead of other aspects, such as subjective suffering, is taken into consideration. In this respect, the more severe the condition, the more the cognitive, emotional, relational, aspects, can be impaired, negatively affecting the healthy, humorous, process and reaction to other's laughing.

In the same line it is also the finding regarding years in care. The longer the period, the higher are also the mean scores. This result may be attributed mainly to two factors, which do not need to be alternative. The first one is that the longer the time in care the more severe is the psychiatric condition. This is not an absolute factor, considering that, to mention just one possibility, a patient may fall into the "less than one year" category simply because that was the amount of time elapsed since the first display of the disturbance, or since the problem was noticed and brought to medical attention (sometimes a lot of time elapses between these two events). It seems however appropriate to maintain that, in general, the time spend in psychiatric care can be considered an indirect, but still reliable, indicator of severity of the condition. The second one refers to the fact that the longer the time lived in a "psychiatric patient" status the higher the probability to develop difficulties connected to the social perception and attitude towards mental problems by the general population. In the most serious cases this has to do with a social stigma, which is in many ways still at work. That means that beyond the problems

connected with and arising from the pathology itself, a person with a psychiatric condition has also often to face situations in which he/she is not treated in a normal, adult to adult, peer-like, way. Not unusually attitudes, and behaviors, from the general population range from overprotection, patronization, simply being ignored/avoided, or, on the other extreme, to being the object of suspiciousness and hostility. It is not surprising that for many patients the fear of being laughed at corresponds with negative perceptions and feelings rooted in a really difficult social interplay; and that even when no harm is intended, there can easily be a misinterpretation of a reality which is anyway difficult to interpret in a positive way. The clinical experience suggests a negative circularity between the problems the patient displays and the problems the interacting people have with the patient. All have a role in building up unfavorable conditions for the production of the “playful frame” of mind (McGhee 1979), which is a necessary requisite to interact in a humorous way and laugh and be laughed at in an enjoyable sharing of experience. A point which deserves further attention is then the distinction between gelotophobia as a secondary syndrome (the effect of stigmatization) and gelotophobia as one of the important features of psychiatric disorders, such as schizophrenic disorders, schizotypal disorders, and, particularly, social phobia. Replication studies should also address other relevant issues, in particular those of comorbidity, and of medication; the failure to assess them is a shortcoming in the present pilot study. In need of further investigation is also the suggested hierarchy of severity among the different diagnostic conditions. Research work so far conducted has shown that the Geloph<15> has sound psychometric properties and has proven to be effective in detecting and discriminating gelotophobia related problems both in general and in the psychiatric population. Nonetheless, from a clinical perspective a question arises whether a high score for Geloph<15> (mean above 3.5 or 4.0) can bring to a diagnosis of phobia in a narrow sense, or (only) to the identification of a serious problem but still not presenting a definite pathological value. For an answer we can again refer to the Diagnostic Statistical Manual of Mental Disorders (American Psychiatric Association 2000), and assess whether in a given case the DSM criteria are met. Gelotophobia is said to be close and akin to Social Phobia. They both have some relevant features in common, such as social withdrawal. Gelotophobia also present specific characteristics. The conviction of being ridiculous, strange, curious, queer etc. to others and the expectation to be laughed at are the features, which distinguish it from

social phobia in its broad definition (Ruch and Proyer 2008a). However, it has also been proposed to consider gelotophobia a part of social phobia: the relationship is to be intended such as that of species to genus.

Therefore, in order to clinically establish whether a given fear of being laughed at can be considered a Phobia *strictu sensu* we may apply, by extension, the eight criteria employed for Social Phobia. Criterion B, for instance states: "Exposure to the feared social situation almost invariably provokes an immediate anxiety response, which may take the form of a situationally bound or situationally predisposed Panic Attack" (American Psychiatric Association 2000: 417). It has to be taken into account that if no real anxiety is elicited, the fear of being laughed at may still be considered an even highly severe problem, but may not lead to a phobia diagnosis. Another important criterion (E) regards the actual impairment of the subject's life. If the phobia does not interfere with the individual's functioning or cause suffering and distress, the diagnosis is not established. To make an example for Specific Phobia (formerly Simple Phobia), this happens when the subject is afraid of snakes but lives in a place with no snakes at all (unless the same idea of having the phobia is distressing). Obviously enough, it is instead difficult to imagine a place devoid of laughing people, be it with kindness of heart or out of malice.

Furthermore, gelotophobia, as all kinds of psychopathological symptoms and problems, can be an element of a wider, possibly more severe, psychiatric picture. What definitely comes out from the present investigation is that given a psychiatric condition there is a high probability to find a gelotophobic component. Besides, this component appears to become more prominent the longer the individual psychiatric story carries on. Interaction between general psychiatric condition and "fear of being laughed at" as well as factors at work which make things deteriorate with time, are issues which deserve attention.

*Dipartimento di Salute Mentale di Ravenna¹
University of Zurich²*

Notes

Correspondence address: g.forabosco@tin.it

* The authors wish to thank Alessandra Tamburini, Angelo Cassin, Fabio Savoretti, Roberto Soglia for helping in providing the data of the psychiatric group. They are also

grateful to all the persons who took part in the study. A special thanks to the anonymous reviewers for their helpful comments.

1. One of the anonymous readers pointed out that the term “schizophrenic” is not commonly used in the literature due to its rather devaluating nature, and suggested to use one of the more appropriate terms, e.g. “patients with schizophrenia.” Although the concern underlined is, in general, shareable, the authors believe that, within the context of an article addressed to a scientific community, it is highly unlikely that any derogatory meaning will be perceived in or attributed to the term “schizophrenic.”

References

- American Psychiatric Association
2000 *Diagnostic and Statistical Manual of Mental Disorders (DSM)*, 4th ed., text revision. Washington, DC: APA.
- Corcoran, R., C. Cahill, and C. Frith
1997 The appreciation of visual jokes in people with schizophrenia: a study of ‘mentalizing’ ability. *Schizophrenia Research* 24, 319–327.
- Falkenberg, Irina, Kilian Klügel, Mathias Bartels, and Barbara Wild
2007 Sense of humor in patients with schizophrenia. *Schizophrenia Research* 95, 259–261.
- Forabosco, Giovannantonio
2007 The ill side of humor: Pathological conditions and sense of humor. In Willibald, Ruch (ed.), *The Sense of Humor*. Berlin and New York: Mouton de Gruyter, 271–292.
- Forabosco, Giovannantonio, Elisa Mazzotti Drei, and Natalie Missiroli
2006 La gelotofobia. Una ricerca con pazienti psichiatrici (Gelotophobia. A study with psychiatric patients), *Frammenti. Rivista di Psichiatria* 15 (1), 67–77.
- Fry, William F. Jr. and Waleed A. Salameh (eds.)
1993 *Advances in Humor and Psychotherapy*. Sarasota, FL: Professional Resource Exchange.
- Hobbes, Thomas
1651 *Leviathan*. London: Crooke.
1840 *Treatise of human nature*. In *The English Works of Thomas Hobbes*. London: Bohm.
- Levine, Jacob and John Rakusin
1959 The sense of humor of college students and psychiatric patients. *Journal of General Psychology* 60, 183–190.
- Marjoran, D., H. Tansley, P. Miller, D. MacIntyre, D. Owens, E. Johnstone, and S. Lawrie
2005 A theory of mind investigation into the appreciation of visual jokes in schizophrenia. *BMC Psychiatry* 5, 325–331.
- Mc Ghee, Paul E.
1979 *Humor: Its Origin and Development*. San Francisco: Freeman.
- Platt, Tracey
2008 Emotional responses to ridicule and teasing: Should gelotophobes react differently? *Humor: International Journal of Humor Research* 21 (2), 105–128.
- Ruch, Willibald
2004 Gelotophobia: A useful new concept? IPSR Spring 2004 Colloquium Series, Department of Psychology, University of California at Berkeley, Berkeley, USA.

- 2006 Allora, che cos'è la gelotofobia? [So, what is gelotophobia?], June 16th, Seminar, Dipartimento di Salute Mentale, Ravenna, Italy.
- Ruch, Willibald and René T. Proyer
- 2008a The fear of being laughed at: Individual and group differences in Gelotophobia. *Humor: International Journal of Humor Research* 21 (1), 47–67.
- 2008b Who is gelotophobic? Assessment criteria for the fear of being laughed at. *Swiss Journal of Psychology* 67 (1), 19–27.
- Titze, Michael
- 1995 *Die heilende Kraft des Lachens* [The healing power of laughter]. Munich: Kösel.
- 1996 The Pinocchio complex: Overcoming the fear of laughter. *Humor & Health Journal* 5, 1–11.
- 1997 Das Komische als schamauslösende Bedingung [The funny as an elicitor of shame]. In Kühn, R., M. Raub, and M. Titze (eds.), *Scham—ein menschliches Gefühl* [Shame—A human emotion]. Opladen: Westdeutscher Verlag, 169–178.
- Walter, Garry
- 2000 The psychiatric patient in American cartoons, 1941–1990. *Humor: International Journal of Humor Research* 13 (1), 7–17.